OSAT Newsletter

Glenn Research Center

Issue 3 July - September 1999

INSIDE THIS ISSUE

CALENDAR OF EVENTS

Date: Friday, July 16, 1999
Time: 2:00 pm
Place: OAI Auditorium
What: *Microgravity Fluids Research Industrial Relevance*, part of the Summer Faculty Fellowship Program Lecture Series
Date: Wednesday, September 22, 1999
Time: 9-10:00 am
Place: Ad Building Auditorium
What: EMO Forum

Office of Safety and Assurance Technologies

Changing Faces, Changing Places

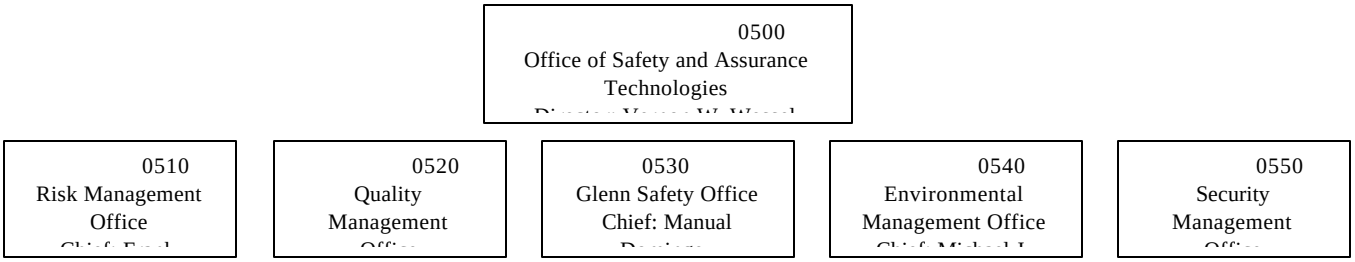
Recently the Office of Safety, Environmental, and Mission Assurance (OSEMA) changed the face of the 0500 Organization with a new name. Now called the **Office of Safety and Assurance Technologies (OSAT)**, this title better blankets what each of the five division level offices do in relation to each other.

Due to his training regarding the Glenn Model Workplace, Bill Wessel, director of the OSEMA/OSAT 0500 Organization, felt a need to break down barriers between the division-level offices. With the old OSEMA title, it was clear that Quality Management and Security Organization 0520, lacked inclusion.

It was decided that choosing an all-encompassing name would be done better with input from all 0500 employees; a contest was formed and all civil servants and contractors alike were encouraged to submit possible new name suggestions. Of the fifty-seven names submitted, a few acronyms stood out for their creativity including: WOOPI (Workplace, Occupational, Oversight, and Program Institute), OMAGOD (Office of Mission Assurance and General Occupational Development), and DWEEBS (Office of Wonderful People Working Together for All Mankind).

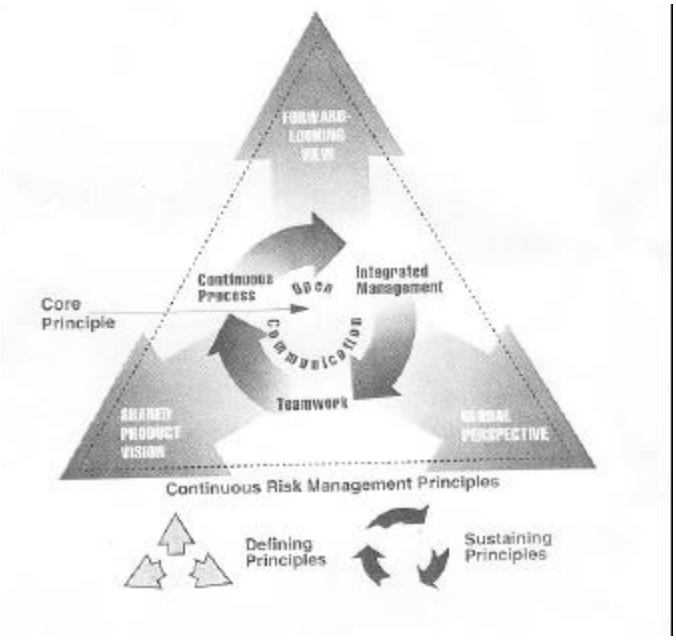
The then-OSEMA Management Staff took a more serious approach and chose "OSAT," submitted by contractor Pat Montgomery of The Science Applications International Corporation (SAIC), because all five divisions have elements of both safety and assurance technology. For his efforts, Montgomery received a one hundred and fifty dollar prize.

Following the example of the 0500 Organization's change of face, two division level offices have selected new titles. According to Wessel, the 0510 and 0530 Organizations' name changes will "more effectively define the support they provide at the Glenn Research Center." 0510, the Project Assurance Office (PAO), will be referred to as the **Risk Management Office (RMO)**, and 0530, currently called the Institutional Safety Office (ISO), requested the title of **Glenn Safety Office (GSO)**.



A Failure Detection and Prevention Tool for Continuous Risk Management

(As taken from the *Continuous Risk Management Guidebook*)



Continuous Risk Management is built upon a set of principles that provide an effective approach to managing risk regardless of the specific methods and tools used. The principles, as depicted (Higuera 94), break down into three types: core, sustaining, and defining.

Continuous Risk Management simply cannot succeed without the constant attention to fostering open communication, the core principle. No one can find the risks to the project as well as the people who work on it day in and day out. Always ask, "Is the way the project responds when members bring forward issues and concerns going to encourage them to bring more?"

The defining principles focus on how the project sees risks and how ambitious it is about looking for and dealing with uncertainty. The principles foster the development of a shared view that clarifies the when, why, and what of Continuous Risk Management.

The sustaining principles focus on how the project goes about its daily business of Continuous Risk Management. These are foundational. If established early in the project and constantly nurtured, these will assure that Continuous Risk Management becomes the way business is conducted.

Continuous process: Risk management must not be allowed to become "shelfware," the processes must be part of daily, weekly, monthly, and quarterly project management. Stamp out the idea that Risk Management only happens during "Risk Management Season."

Continuous Risk Management is not "one size fits all." To be effective, tailoring is needed. Tailoring occurs when the team adapts the Continuous Risk Management Processes and select methods and tools which best fit with their project management practice and their organizational culture. Following the principles of Continuous Risk Management is the key to successful tailoring. Methods and tools are given in the Continuous Risk Management Guidebook and the Assurance Effectiveness Guidebook.

The Failure Detection and Prevention Project, a joint JPL/GSFC/GRC RTOP funded by Code Q, is developing various tools which will be useful to S&MA and project personnel in identifying risk and making decisions regarding managing or mitigating risk. One of these products is a series of Risk Balancing Profiles (RBP) covering several mission assurance topics. These are designed for use essentially as "smart" check lists early in the project formulation phase to assist the Project Managers and their S&MA leads in defining the scope and content of the Project's Mission Assurance activity.

The project content can be selected using various processes. A project can select the lowest risk approach and determine if this fits within the available resources. If not, tailoring can either determine how much can be done with the available resources and establish what residual risk exists, or the project can begin by eliminating the undesired risk and finding what project content is thus required, and then compare to available resources. The process is then iterated to arrive at an acceptable balance between available resources and residual risk.

Quality and Safety Achievement Recognition (QASAR) Award

This quarter we will continue our articles on the QASAR award and the QASAR process with a discussion of the selection process and criteria.

SELECTION PROCESS

- At GRC the OSAT office evaluates nominees and select local recipients on a quarterly basis.
- Annually, a QASAR Award Board, composed of representatives from the Centers and Headquarters, will select ***one individual in each category*** to receive the Agency QASAR "Best of the Best" awards. Bill Wessel is the GRC representative to this board.
- With respect to this Award process, the Jet Propulsion Laboratory is considered a NASA Center.
- The QASAR award period runs from calendar year to calendar year. Nominations for the Agency "Best of the Best" for the previous calendar year are due to the Office of Safety and Mission Assurance no later than January 10, or, if January 10 falls on a weekend, the last working day before January 10. See Section IX.
- This year the "Best of the Best" award was presented to by the Administrator at the Conference in April.

QASAR AWARD CRITERIA

To be eligible to receive a QASAR Award, an individual must accomplish at least one of the following:

- Identify or implement significant quality or safety improvements to GRC or NASA products, services, or processes
- Institute continuous quality or safety improvement through GRC and/or contractor action teams
- Identify potential quality or safety problems, along with recommended corrective action, to preclude mishaps or major systems impacts
- Advance the quality and safety profession through other significant accomplishments

QASAR SUPPLEMENTAL CRITERIA ELEMENTS

The following items may be considered within the criteria to determine an individual's eligibility for the QASAR Award:

- Was an operational hazard identified that, if not corrected, could cause injury to personnel and/or damage to ground support equipment or flight hardware?
- Were recommendations made that significantly improved product or service quality or safety, safety methods, or safety procedures, and/or resulted in significant resource savings? Or did the process cost more and result in better reliability and safety?
- Has the process resulted in advancing one or more of the elements of the NASA Administrator's safety initiatives?
- Has the individual distinguished him or herself in the quality or safety area by:
  - -teaching quality or safety courses in colleges/universities,
  - -serving on technical advisory committees or other significant outreach activities, or
  - -making a significant contribution to GRC's or NASA's body of knowledge in quality and/or safety principles?

Each quarter GRC strives to identify meritorious candidates in each category for recognition by the GRC community. If you have a candidate or a question/suggestion please call or e-mail David Ross (3 6546).

Slip, Trips, and Falls, at the Workplace

Falls are the most common office accident and may result in disabling injuries. Learning to recognize and correct slip, trip, and fall hazards is your best insurance. A fall can occur when your balance is thrown so far off center that you lose your footing. This usually happens when your feet lose friction and slip, or when your foot strikes an object and you trip. In either case, any serious loss of footing leaves you with nowhere to go but down.

One of the most common causes of office falls is tripping over an open drawer. Bending or leaning over while seated in an unstable chair, slipping on wet floors, and tripping over electrical cords are other common hazards. Loose carpeting, objects stored in halls or on stairs, poor lighting, improper footwear and using makeshift ladders (such as a chair or stack of books) are other hazards that invite falls.

If you find yourself heading for a fall, remember to roll, do not reach! By letting your body crumple and roll, you are more likely to absorb the impact and momentum of a fall without injury. Reaching an arm or leg out to break your fall may result in a broken limb instead.

Application of the cautions below should make your work day one free from falling, slipping, or tripping.

FALL PREVENTION CHECKLIST

- Be sure your pathway is clear before you walk.
- Always immediately close desk, cabinet, and file drawers
- Avoid bending, twisting, and leaning backward while seated.
- Secure electrical cords and wires away from walkways.
- Always use a stepladder for overhead reaching.
- Clean up spills immediately.
- Pick up objects co-workers may have left on the floor.
- Report loose carpeting or damaged flooring.
- Make sure walkways are well lit.
- Never carry anything that obscures your vision.
- Wear stable shoes with non-slip soles.
- Don't run indoors!
- Use the 4 to 1 ladder rule (set the base of your ladder one foot away from the wall for
- every 4 feet of ladder height).
- Make sure extension ladders have safety shoes.
- Tie off the ladder or have someone support the base.
- Never use the top two rungs of a ladder.
- Never over-reach; especially while on a ladder.

Application of the cautions above should make your work day one free from falls, slips or tripping.

Pollution Prevention Always a Must

Pollution Prevention at the NASA Glenn Research Center has always been a primary concern of those working in the Environmental Management office (EMO), the center Headquarter offices in Washington DC, the Environmental Protection Agency and its divisions, and the taxpayers living in communities of the surrounding Cleveland area. Pollution prevention must also be a top priority for the employees of NASA Glenn. The center has the responsibility to provide a healthful, non-toxic working environment for each person it employs, and it is every person's responsibility here at Glenn to act in compliance with the pollution prevention program.

In recent years, the NASA Glenn Research Center has made excellent strides in preventing, reducing, reusing, recycling, conserving, and disposing of possible pollution problems. For example:

- We no longer use virgin paper. All paper for computer, printing, and copy use as well as paper toiletries is made of recycled paper products.
- Industrial Waste Sewers connect to basins that separate oil from water to prevent the improper discharge of oil into the sanitary sewer system.
- Incinerators and flares, industrial-sized flames that burn off potentially harmful gasses, have been installed to convert carbon monoxide to less toxic carbon dioxide and hydrogen gas to water.
- We have converted our primary source of heat from coal burners to natural gas with fuel oil as a back up.
- We established a Chemical Exchange Program that allows unused chemicals to be transferred to other employees to use rather than disposing of the chemicals.
- We have implemented a Pollution Prevention Incentives program that invites employees to submit suggestions for pollution prevention and waste minimization. A team selects the best ideas that are the most innovative, cost effective, and waste preventative. All participants are recognized for their participation in the program. **Contact Dan Papcke in the Environmental Management Office at 433-8441 for additional information.**

Pollution prevention is worth doing outside of the office as well. Pollution affects the lives of everyone on the planet, and there is no option to reverse the amount of toxins distributed into the atmosphere, hazardous wastes are discarded without thinking, or chemicals dumped into lakes, streams, and oceans.

To start living a more environmental conscious life, try implementing just a few or all of these tips into your everyday lifestyle:

- Take used motor oil to a service station or recycling station.
- Keep separate bins for each recyclable material at work and at home. Examples: A bin for recyclable aluminum cans next to the pop machine at work, a box for old newspapers ready to be recycled near the office mailbox area, or a sturdy plastic container for recyclable glass materials next to the garbage pails at home.
- Some common household "trash" items can be recycled as well. Make a compost pile! Compost piles are easy to start and require little maintenance; compost helps any flowerbed or lawn grow to its fullest potential. Things to compost include: Cardboard rolls, eggshells, sawdust, vacuum cleaner lint, fur, yard clippings, wool or cotton rags, fireplace ashes, hair, vegetable trimmings, coffee grounds or filters, leaves, and tea bags.
- Used computer printer laser cartridges can be filled or recycled. Empty toner cartridges can be mailed to their maker free of charge if shipped by UPS or Mailboxes Etc. For information call Canon at 1-800-962-2708, Hewlett Packard at 1-800-527-3753, or Apple at 1-800-776-2333.
- In Ohio, there are 246 curbside recycling programs. If you live in the Cuyahoga County area, find out if your city has one and what pick up dates and times are by contacting the **Cuyahoga County Solid Waste District at (216) 443-3749.**

For more information, please contact Dan Papcke at 3-8441 to receive a copy of the updated Pollution Prevention Pamphlet.

Complacency in Information Protection

With the recent developments at the Department of Energy's (DoE) Los Alamos National Laboratory, the emphasis on Information Security has never been more prevalent. This one incident may have lost 10 years of U.S. nuclear weapons secrets to China when one of its workers transferred hundreds-of-thousands of lines of code from a secure server to an insecure one. One would have to believe that a mission so critical would have strict guidelines to prevent an occurrence of this magnitude. You can find volumes of government regulations on Computer and Information Security, so the lack of policy to follow and enforce was not the problem. So, how could this have happened?

Unfortunately, people are the weakest link in the security discipline. Careless acts, such as the previously mentioned, stem from an age-old antagonist of security, **complacency**. Some people have the belief that these issues are someone else's problem. The belief that it can't happen here or it can't happen to me. The belief that if it could happen, then it would have happened by now. It is the same ideology that has cost some corporations millions and weakened our country's national security. The severity of this event may not be known for years and the repercussions may be unfathomable. Well, how do we fix this problem?

In this technology driven age, computers are instrumental in the processing and storage of all types of information. Government agencies, such as the one in Los Alamos, rely on computers for handling information of the most crucial nature. That is why information security policy and safeguards are implemented to ensure that no protected information is compromised. At Glenn Research Center, the implementation of these policies and safeguards are the responsibility of everyone who uses a computer to access or process classified information. Each of us must take ownership in security and every time we use a computer it should be with security in mind. We must also be willing to correct our co-workers when improper acts or misuse are detected.

We must strive to make security at Glenn Research Center a proactive practice instead of reacting to every incident and constantly being behind in the game. Small but important security routines that we can practice are:

- Limit only appropriately cleared personnel who have a need to know in the work area.
- Arrange the classified computer system so it is not visible to an ucleared person inadvertently in the work area.
- Shut the system down at the end of the work day.
- Ensure all classified media is properly secured when not in use.
- Contact the Security Management Office at 3-3153, if you notice incorrect actions or any act that appears to be suspicious.